JOURNAL of the
CANADIAN ASSOCIATION FOR HEALTH, PHYSICAL EDUCATION AND RECREATION

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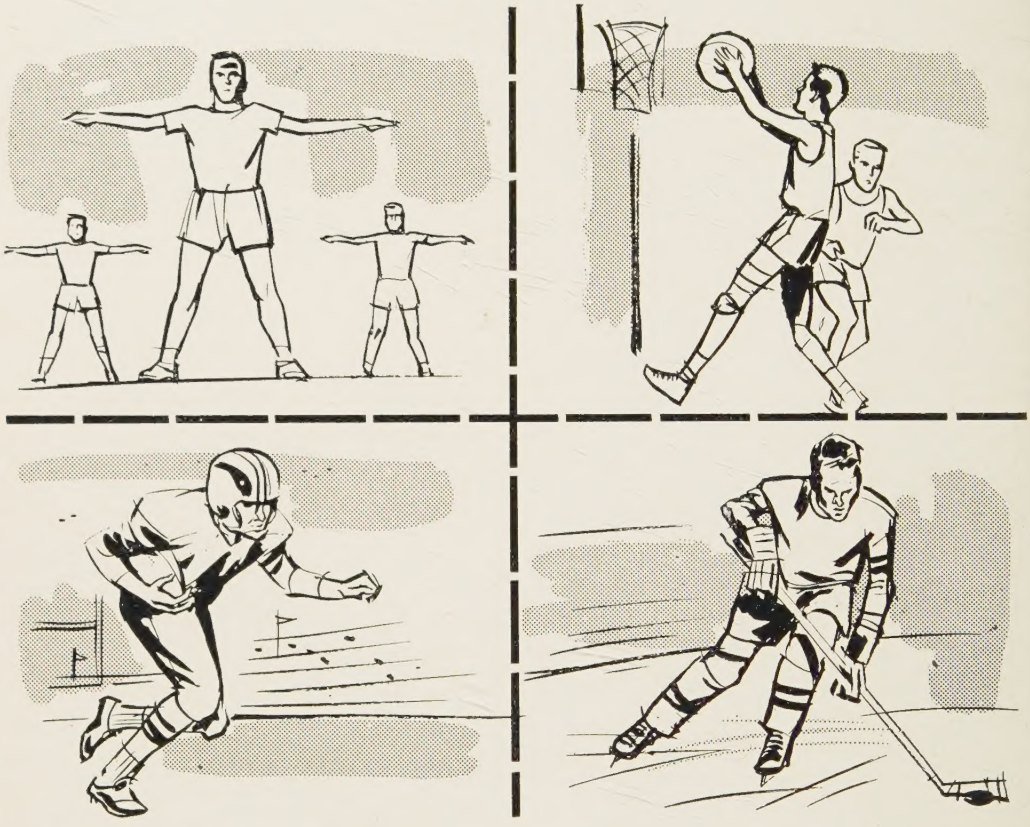
NATIONAL HEALTH WEEK: Jan. 31 - Feb. 6

Vol. 26 December-January, 1960 No. 2

★ SCHOOL SPORTS EQUIPMENT



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Journal of the Canadian Association For Health, Physical Education And Recreation

Vol. 26, No. 2 Toronto, Ontario Dec.-Jan. 1960

PUBLISHED BY
The Canadian Association for Health, Physical Education and Recreation, Inc.

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McCorquodale & Blades, Printers Ltd.,
260 Bartley Drive,
Toronto 16, Canada

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Subscription rate for non-members: $5.00 per year.

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Editorially Speaking

A PRESCRIPTION FOR HEALTH

By DR. STEWART A. DAVIDSON
Vice-President for Health Education

As the individual responsible for the health (or lack of it) of the Health Section of CAHPER, I recommended to the National Convention that surgery be applied to the "H" in CAHPER to remedy a malignancy which might affect the parent body. Further consultation took place with some members of the new executive of CAHPER at a meeting held in the rustic setting of the Haliburton district, where the Ontario government's leadership training camp for counsellors is located. This resulted in a decision to limit the surgical treatment and to attempt further medication accompanied by transfusions of a richer mixture of enthusiasm and effort. I am considerably relieved by this decision, for it permits me to continue as a member of the National Executive of CAHPER and I do wish to be a part of the up-surge of interest in our Association which manifests itself in the healthy membership growth, the production of a Journal worthy of the term "professional", and the increasing demand from the general public for greater support of the things for which our Association stands.

Here, then, is the recommended treatment: it is the intention of the Vice-president for Health to make available to the general membership information pertaining to the latest advances in medical research in those areas which are most closely allied with our field of endeavour. (Some examples would be Dr. Hans Selye's work on "Stress"; the Cancer Society's research on the effects of smoking; Dr. Gustave Gingras' work at the "Institut de Réhabilitation de Montréal"; and the work of Dr. Baruch Silverman at the Mental Hygiene Institute of McGill University.)

The medium of the Journal will be utilized to bring this capsuled information to the membership and the Health Chairmen of the Branches will be asked to forward items of related interest to me for personal follow-up with the research individuals concerned. This should result in further articles for inclusion in the Journal.

This may start slowly, but it is felt that it will serve to put our membership in closer touch with the latest developments in the field of health and at the same time will indicate to the various researchers and organizations concerned with health problems that we are a national body which is interested in their progress and we may be able to contribute to further advancement of that health knowledge in some way.

It should also result in our Health Section being able to compile a valuable listing of key persons actively engaged in health research with whom we might maintain close contact, thereby being informed of the latest developments in the particular fields of research.

For this file to grow to the extent where it will be of value it is essential that members who know of individuals or organizations engaged in research into problems of concern to our profession pass this information on directly to me and I shall make it my responsibility to follow it up from that point.

You may have noticed that no mention has been made of any attempt to approach the problem of health education or health teaching. This is where the surgery mentioned earlier was applied. It was felt that the wide variety of methods of instruction, of materials covered, of course requirements, of course credits, of instructional periods provided, etc., made for an unwieldy, nebulous area of exploration which would probably serve no other purpose than comparative information and therefore no effort will be expended in this direction.

As Vice-president for Health, I feel very confident that with this clearly-defined and specific role assigned to our Section, it should become once more a vigorous and essential part of the Association as a whole.

Une Ordonnance pour La Santé

PAR STEWART A. DAVIDSON

Etant chargé de la santé (ou de son absence) à la branche de la santé de CAHPER, j'ai reccommandé au congrès national d'appliquer un traitement chirurgical au "H" de CAHPER afin de remédier à un mal qui peut influer sur l'Association mère. D'autres entretiens ont eu lieu avec quelques membres du nouveau corps exécutif de CAHPER à une séance tenue dans la région des lacs Kawartha, où est situé le camp que le gouvernement de l'Ontario maintient en vue de la formation des conseillers à leur rôle de chefs.

On a décidé, en fin de compte, de limiter le traitement chirurgical et d'essayer d'autres remèdes, qu'accompagneraient des transfusions d'un mélange plus riche d'enthousiasme et d'effort. Cette décision m'a beaucoup soulagé, parce que cela me permet de demeurer membre du bureau exécutif national de CAHPER, et j'espère participer à la recrudescence d'intérêt porté à notre association qui se manifeste par le nombre croissant de nos membres, la publication d'un journal digne du terme "professionnel" et la pression du grand public qui demande de plus en plus que l'on soutienne davantage les objectifs que notre Association défend.

Voici le traitement recommandé: c'est le désir du vice-président de la branche de la santé de mettre à la disposition des membres les renseignements qui se rapportent aux progrès les plus récents réalisés dans les domaines de la recherche médicale qui touchent le plus près à notre champ d'action. (Par exemple, l'ouvrage du Dr. Hans Selye sur le "Stress"; les recherches de la société du cancer sur les effets de la cigarette; les travaux du Dr Gustave Gingras à l'Institut de Réhabilitation de Montréal, et les travaux du Dr Baruch Silverman du **Mental Hygiene Institute** de l'université McGill.

Le Journal transmettra aux membres ces renseignements et le président de la branche de la santé de chaque succursale sera prié de me transmettre des articles qui se rapportent aux mêmes sujets afin que je continue de m'occuper de ces questions auprès des préposés intéressés à la recherche.

La mise en marche sera peut-être lente, mais, je crois, cela permettra à nos membres d'être mieux au courant des derniers développements dans le domaine de la santé et, en même temps, démontrera aux chercheurs et aux organismes intéressés aux problèmes de la santé que nous sommes un corps national qui s'intéresse à leur progrès et que nous pourrons contribuer de quelque manière à apporter de nouveaux progrès dans le domaine de la santé.

Notre branche de la santé pourrait ainsi recueillir une liste de personnes-clefs préposées activement à la recherche dans le domaine de la santé et avec qui nous pourrions nous tenir en contact étroit et, de cette façon, nous tenir au courant des derniers progrès dans ce domaine particulier de la recherche.

Afin que cette liste devienne assez importante pour être utile, il est nécessaire que les membres qui connaissent des individus ou des organismes qui s'occupent des travaux de recherche auxquels notre profession s'intéresse, me fassent parvenir directement ces renseignements. Je me ferai un devoir de poursuivre ensuite la tâche.

Vous avez peut-être remarqué qu'il n'a été nullement question de s'attaquer au problème de l'éducation de la santé ou de l'enseignement de la santé. C'est là que la chirurgie mentionnée au début est intervenue. On s'est aperçu que la grande variété des méthodes d'enseignement, de sujets étudiés, des conditions des cours, des points accordés, des périodes d'instruction, etc., constituait un champ d'exploration difficile et nébuleux qui, probablement ne servirait qu'à fournir des renseignements pour fins de comparaison. Par conséquent, aucun effort ne sera tenté dans cette direction.

Comme vice-président de la santé, j'ai grand espoir que, grâce à ce rôle bien défini et spécifique, notre branche deviendra une fois de plus une partie vitale et vigoureuse de notre Association, prise dans son ensemble.

(French Translation:

— By Jean-Pierre Gautier)

The London Public Schools' Physical Efficiency Study

By
JOHN A. FAULKNER and MICHAEL S. YUHASZ
Physical Education Department
The University of Western Ontario

M. S. Yuhasz

In the Spring of 1958, the London Public Schools' Principals' Committee on Physical Education met with members of the Physical Education Department of the University of Western Ontario to plan the Physical Efficiency Study. The purposes of the study were to determine the present physical fitness, motor ability and physical efficiency levels of boys and girls in Grades six, seven and eight; to compare these levels amongst six public schools which offer widely varied facilities and programmes, and to compare the levels with those found in other communities. (Note: the latter two objectives will be covered in later papers.)

ADMINISTRATION

The data on the seven item Western Physical Efficiency Test were collected in six selected London Public Schools during October 1958. Raw scores were recorded directly upon the Individual Score Cards (4) which were carried from Test Station to Test Station by the children. After all items were completed, the child handed the card to the Test Supervisor. Rotation from station to station was by squads with all squads moving simultaneously. The signal for rotation was made by the Test Supervisor when all squads had completed their item. This rotation enabled the leaders in charge of each item to demonstrate and explain the item only once per squad and maintained better organization and control.

SELECTION OF TEST ITEMS: Although both physical fitness and motor ability are reflected in all test scores and any division is somewhat arbitrary, the items which are **stable** and **resistant to change** are generally classed as measuring motor ability, whereas items which **fluctuate readily** through changes in strength and endurance are presumed to measure physical fitness (1). Physical efficiency may be considered a

combination of these two factors. As such it is concerned with the ability of the body to function effectively in fundamental large muscle activities of short or long duration. In the Western Physical Efficiency Test, the speed sit-ups, modified pull-ups and the 200 yard run are predominantly physical fitness items, while the 50 yard dash, agility run, standing broad jump and softball throw are predominantly motor ability items.

COLLECTION OF DATA: Where there was more than one class in a particular grade level, the class tested was selected at random, so that one complete class at each grade level was tested in each of the six schools. The schools were selected on the basis of diversity of their facilities and programme. The classes ranged in size from twenty-four to thirty-two. Classes were divided into four squads for the indoor items (speed sit-ups, modified pull-ups, standing broad jump and agility run), and into two squads for the outdoor items. One squad ran the 50 yard dash and then the 200

*This is the first of three articles dealing with this study

yard run while the other squad threw the softball. To offset any possible effects of fatigue, the standing broad jump and the agility run were interspersed with the speed sit-ups and the modified pull-ups. In schools without gymnasium facilities, all items were administered out-of-doors.

Since the children did not have regulation gymnasium uniforms, both boys and girls were encouraged to wear running shoes and the girls were asked to wear slacks.

EXPLANATION OF TEST ITEMS

All test items must be administered exactly as outlined to ensure reliability. To reduce the time spent in testing, squad leaders should be trained to handle a specific item. Greater pupil interest and enthusiasm will also result from the well-organized testing of small groups since everyone is kept active. With trained leaders, the total 7-item battery can be administered to 25 to 30 pupils in two 35-minute periods.

30 SECOND SPEED SIT-UPS (Abdominal Strength)

Staff and Equipment: 1. A tumbling mat. 2. A timer's clock or stop-watch calibrated in seconds. 3. One trained leader.

Test: Subject assumes a back-lying position on the mat, legs straight, and with his hands placed behind his head. The legs are held firmly just below the knees by his partner. On starting signal, the subject sits up so that his trunk is perpendicular to the floor, then quickly returns to a back-lying position. This movement is repeated as many times as possible in 30 seconds.

Scoring: The movement sit-up and return is counted as one execution. The score is the number of completed executions counted to the last half a sit-up. One trial only is allowed.

MODIFIED PULL-UPS (Arm and Shoulder Strength)

Staff and Equipment: 1. A metal bar approximately 1½ inches in diameter which can be adjusted from approximately 2 feet to 2 feet 6 inches, from the floor. A doorway gym bar may be used for this purpose. 2. One trained leader.

Test: The subject assumes a back-lying position with the bar adjusted to an extended arm's length above the base of the sternum (breastbone). The subject grasps the bar with an overgrasp (knuckles toward face). From this position he must raise himself, with body held straight, until the forehead clears the level of the bar and then lower himself to a back-lying position. Movements accomplished by piking, arching or merely raising the head, are not to be counted. Executions must be made continuously and resting is not allowed. A trial ceases after three unsuccessful executions.

Scoring: The movement pull-up and return is counted as one execution. The score is the number of completed movements made consecutively without rest. The administrator should crouch with his eye level at the height of the bar and count successful completions aloud. The subject then knows when he has not pulled high enough or when he has some other fault in his execution.

STANDING BROAD JUMP (Leg Power)

Staff and Equipment: 1. A 4' broad jump board calibrated in feet and inches. 2. A towel. 3. A block of gymnastic chalk (used to chalk the heels of each competitor). 4. One trained leader.

Test: The subject stands with his feet slightly apart and toes just behind the take-off line. The hips, knees and ankles are flexed and with the aid of the arms, a vigorous forward thrust off both feet is made. The landing should be made with feet even.

Scoring: The distance from the take-off line to the heel of the nearest foot, or any other portion of the body that touches the floor, is scored to the nearest inch for the best of three trials.

AGILITY RUN (Agility and Speed)

Staff and Equipment: 1. 4 chairs. 2. A stop-watch calibrated to one-tenth of a second. 3. Markings — two parallel lines 30 feet apart are required with four chairs spaced 10 feet apart and one located on each line. A mark 6 feet on each side of the near chair indicates the starting and finishing points. 4. One trained leader and a recorder. (NOTE: Diagram of the lay-out may be found in the C.A.H.P.E.R. Journal of March 1958 on page 20.)

Test: The subject lies prone behind the starting line, his forehead over the mark and his hands at the sides of his chest. On a whistle signal, the subject jumps to his feet, runs straight down to the far line, places one foot over it, reverses direction, runs straight back, turns around the near chair, zig zags down, around the end chair, zig zags back, around the near chair, runs straight down on the opposite side, places

one foot over the far line and runs across the finishing mark.

Scoring: The elapsed time from the whistle signal to the passage of the runner's chest over the finishing mark is scored to the nearest tenth of a second. Two trials only are allowed.

50 YARD DASH (Speed) 200 YARD RUN (Speed and Endurance)

Staff and Equipment: 1. A 50 yard straight-away and a 200 yard measured course. 2. A stop-watch calibrated to one-tenth of a second. 3. A starting flag and whistle. 4. A starter, two trained timers, and a recorder.

Test: A racing position is assumed behind the starting line. The starter raises the starting flag overhead and then co-ordinates the downward swing of the flag with the starting signal (whistle). The runner sprints the distance to the finish line in the shortest possible time.

Scoring: The elapsed time from the starting signal (whistle) to the passage of the runner's chest across the finish line is scored to the nearest tenth of a second. One trial only is allowed.

SOFTBALL THROW FOR DISTANCE (Arm and Shoulder Coordination)

Staff and Equipment: 1. 3 to 6 softballs. Markings — the throwing area is marked off with lines parallel to the starting line at the 20 foot mark and at every 5 foot mark thereafter up to 180 feet. The markings of a football field may be substituted if cards interpreting each ten yard mark in feet are placed along the sideline for ready reference. 2. A recorder, a distance marker, and two retrievers.

Test: The subject stands behind the starting line and at right angles to it. The throwing arm is back and the rear foot must be stationary prior to delivery. Although the delivery must start with the rear foot stationary, the lead foot may be moved and the rear foot may be brought forward on the follow-through as long as it does not go over the starting line.

Scoring: The best of three trials is scored to the nearest foot.

ANALYSIS OF DATA

The mean and standard deviations were computed and normative tables constructed by age for boys and girls in each of the seven items. These tables may be obtained from the authors, c/o Physical Measurement Laboratory, Thames Hall, The University of Western Ontario.

The t test (2) was employed to determine the significance of the differences between the performance of boys and girls of the three age levels in each test item (Table 1).

CONCLUSIONS

1. Although there was not a significant difference (.01) amongst age groups in all items, particularly the pull-ups and sit-ups, the difference in the majority of items warranted the development of normative tables for each chronological age group.
2. The lack of a maturational influence in arm and shoulder strength and abdominal strength for both boys and girls and in the 200 yard run, 50 yard dash and agility run for girls, may be attributed to cultural influences. The home, the school and the community are neglecting to provide or encourage opportunities for adequate development in these areas (Table 2).
3. The t test comparison of the means between the boys and the girls showed the boys to be superior at the 1 per cent level of significance throughout all three age levels in sit-ups, pull-ups, 200 yard run, standing broad jump, and the softball throw. Significant differences at this level were also found in the 50 yard dash for the 12 and 13 year olds, and in the agility run for 13 year olds (Table 1).

After an evaluation of many studies of sex differences in motor activities, Kingsley and Garry concluded that muscular strength was likely the only innate difference between boys and girls and that there are comparatively few skills so dependent upon strength that girls may not become as competent as boys (3). Although the studies quoted are largely concerned with fine rather than gross motor abilities, the agility run, the 50 yard dash, the standing broad jump, and, to a lesser extent, the softball throw for distance, might be classed as items more dependent upon coordination than strength. The major criterion for the superiority of the boys must, therefore, be attributed to previous experiences. The speed sit-ups and pull-ups are without question strength items. However, since the subjects are required to raise their own body weight it becomes a relative quality

(Continued on page 10)

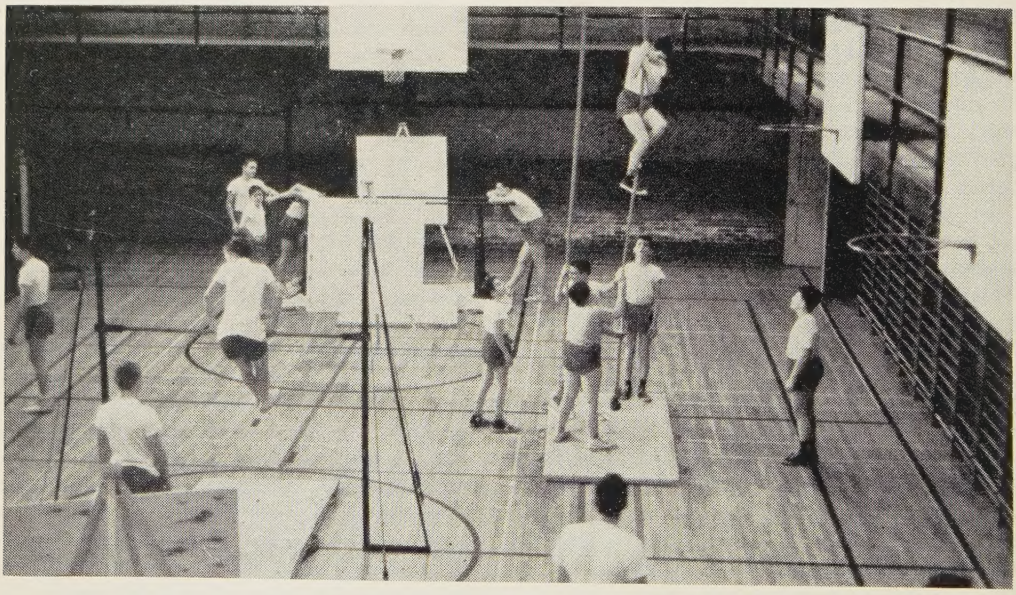
TABLE 1

COMPARISON OF MEAN SCORES BETWEEN BOYS AND GIRLS 11 TO 12 YEARS OF AGE IN A SEVEN ITEM PHYSICAL EFFICIENCY TEST BATTERY

ITEM / AGE	11 Years	12 Years	13 Years
Speed Sit-Ups	4.23*	6.21*	5.47*
Pull-Ups	5.38*	21.81*	20.14*
Standing Broad Jump	4.78*	3.92*	4.13*
50 Yard Run	1.69	—3.112*	—4.37*
200 Yard Run	3.24*	—3.95*	—7.23*
Softball Throw	13.21*	16.76*	15.23*
Agility Run	—.913	—.407	—4.36*

* Significance at the 1 per cent level of confidence (t = 2.58)

NOTE: Negative numbers occur in events where a lower score represents a better result.



Please Note: The pictures used in this article are not related directly to the physical efficiency study. They were taken by President Gordon Wright at York Memorial Collegiate of a general activity class in Apparatus. The use of "Gymnastic Standards" is well demonstrated.

TABLE 2

MEANS AND STANDARD DEVIATIONS BY CHRONOLOGICAL AGE GROUPS AS OF JANUARY 1

		Pull-Ups (Number)	Sit-Ups (Number)	200 Yard Run (Seconds)	50 Yard Run (Seconds)	Agility Run (Seconds)	Standing Broad Jump (Feet-Inches)	Softball Throw (Feet)
Girls 11 years	Mean	5	14	40.7	8.6	21.1	4'6"	54.1
	Standard Deviation	5.11	4.59	3.96	.70	1.38	6.87	18.30
	Number	96	95	84	81	95	96	96
Girls 12 years	Mean	5	14	39.8	8.5	20.4	4'8"	60.9
	Standard Deviation	4.27	4.39	4.16	.76	1.87	7.37	20.67
	Number	108	108	103	107	112	108	108
Girls 13 years	Mean	5	14	40.0	8.4	21.4	4'10"	68.2
	Standard Deviation	5.22	4.38	4.97	.74	2.28	7.07	19.10
	Number	72	75	71	68	72	73	83
Boys 11 years	Mean	10	17	38.4	8.4	20.9	4'11"	96.5
	Standard Deviation	6.85	4.48	4.47	.76	1.44	6.22	22.23
	Number	70	73	59	74	72	69	72
Boys 12 years	Mean	10	18	37.1	8.2	20.3	5'0"	108.0
	Standard Deviation	5.95	4.01	3.19	.64	1.74	7.10	23.0
	Number	106	96	101	106	104	96	105
Boys 13 years	Mean	11	18	35.8	7.9	20.0	5'3"	120
	Standard Deviation	6.79	4.63	3.21	.65	1.64	7.84	24.28
	Number	77	77	76	80	79	81	81

AMATEUR ATHLETIC UNION OF CANADA ANNUAL AWARDS

The A. A. U. of C. recently nominated Anne Heggtveit of Ottawa for the Lou E. Marsh Trophy as the outstanding athlete of the year.

Gordon Dickson of Hamilton was awarded the Norton H. Crowe Trophy for the second successive year as the Canadian male athlete making the most outstanding contribution to any sport under A. A. U. of C. jurisdiction.

The Davies Trophy was given to Doug. Kyle of Edmonton as the outstanding track and field athlete.

Other awards were presented to:

Bruce Kidd, Malvern Collegiate, Toronto, as the outstanding junior athlete of the year received the Viscount Alexander Trophy.

Marian Munro, of Richmond Hill High school, the Myrtle Cook Trophy as the outstanding woman athlete in junior track and field.

George Stulac, Toronto teacher, was awarded the F. A. Rawell Trophy as the outstanding Canadian athlete in field events.

Walter Noel, of Manitoba, received the Tom Longboat Trophy as the outstanding Indian athlete of the year.

John Passmore, McMaster University hurdler, won the Dr. Fred Tees Memorial Trophy as the outstanding Canadian track and field athlete enrolled at a Canadian University.

(Continued from page 7)

and the differences found are not to be expected in the age group dealt with in this study.

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NATIONAL HEALTH WEEK

January 31st-February 6th, 1960

As a Community Leader you can:

Form a local **Health Committee** within your own organization. Service Clubs, Home and School and Parent-Teachers Associations, women's groups, business and industrial associations, organized labour, churches, young people's groups, ALL should have their own standing committees on health. These committees should support **National Health Week** but they can also promote various other health projects important to your own community.

This Committee can be of use to Your Community throughout the year on a permanent basis

- Ask your Mayor or Reeve to issue a **Proclamation** re National Health Week and to publicize the Proclamation through the press and radio.
- Ask your local **Churches** to start Health Week with sermons on health and, if possible, have doctors participate in the service.
- Ask your local **School** authorities to give special emphasis to Health Week in the schools with special assemblies, writing and acting health plays, conducting experiments, creating original health posters, etc.
- Ask your **Service Club** president to arrange to have a speaker on some health topic, preferably one of local significance, during or near National Health Week.
- Ask your local branches of **Voluntary Health Organizations** to call attention to their own special field during the Week.
- Ask your local stores to use their windows for Health Week **Displays.**
- Ask your **Local Newspapers** to give prominent coverage to all that happens in your community in connection with Health Week.
- Arrange with your **Local Radio and/or Television Stations** for talks, interviews or panel discussions on health topics during the Week.

For further information, write to the Health League of Canada, 111 Avenue Road, Toronto 5, Ontario

The Health League of Canada, 1111 Castle Bldg., 1410 Stanley St., Montreal, Quebec

The Greater Vancouver Health League, 1300 Robson St., Vancouver 5, B.C.

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Our Executive Secretary Reports on Visit to Eastern Canada

By

C. R. BLACKSTOCK
Executive Secretary

"This land is your land,
this land is my land
From Bona Vista to
Vancouver Island
From the Arctic Circle
to the Great Lakes
Waters
This land was made for
you and me"
—THE TRAVELLERS

How appropriate a song about our Land! The Executive Secretary learned a lot during the trip to the Atlantic Provinces. Fortunately, the Red Cross Society benefits from the fine cooperation of many able physical educators which made it easy to contact people of our Association.

In Montreal on the way down east and north, Miss Iveagh Munro brought together the members of the Board of Directors in and around Montreal one evening. To them a report was made of Executive action, plans and concerns. Suggestions were received on a number of matters. When and where to hold a full Board Meeting was discussed.

The Professional Registry was a topic discussed at some length. This should result in a detailed report soon. The existing arrangement for it was authorized to run until September 1st, 1960.

Way down north, near the "tickle" not far from St. John's Newfoundland our Association has two enthusiastic leaders in Miss Gerstman and Doug Eaton. The Executive Secretary was privileged to meet with the physical education and recreation leaders.

Memorial University is getting a whole new set of modern buildings and facilities including a fine physical education plant which should be ready for use in about a year's time. Most of us in the rest of the nation have very little idea of the intricacy of this most easterly province's problems.

Nova Scotia, like all the other Atlantic provinces, would do better by itself if it spoke louder about the many assets it has and the many things our people are doing so well.

The Executive Secretary stirred the wrath of an editor in Halifax because it was suggested that new schools should have swimming pools built into them. Being a mere Upper Canadian this impertinent proposal was unwelcome. In Halifax there were three opportunities to be on the air for Water Safety and Physical Education.

The Halifax members of M.A.H.P.E.R.S. —since changed to the Atlantic Provinces Association Physical Education and Recreation—held a tea at which a report was made of the Association affairs.

Prince Edward Island is a place where practice has been adapted to the "nature, needs and capacities" of the people. The schools in many cases have fine facilities and equipment for physical education. Programmes are headed up by able people. One remarkable natural recreation facility is the twenty-five mile long beach of the National Park. It is sand too, backed by sand dunes. The surf bathing possibilities are superb.

The University of New Brunswick is a gem! You have to be there to believe it. In Fredericton we sat in on a meeting of the local Association group which calls itself a Council. These folks heard a report from the National Executive.

John Meagher has a sizeable School of Physical Education built up. The students showed themselves able and enthusiastic. They heard a talk on the roots of Physical Education in Canada.

Saint John has good school programmes. The new Y.M.C.A. Physical Education facilities, in a superb building, are remarkable. The Executive-Secretary was in the hands of an enthusiast, Fred Tobias, the Divisional Director of Water Safety for the Red

(Continued on Page 19)

Playing Positional Hockey

By JACK KENNEDY

When we consider the components of most athletic games, we usually think in terms of fundamental skills, team play, strategy, etc. These are essential to successful individual or team effort in any athletic contest and certainly hockey is no exception. But the excessive speed, continuous flow of play, and interchange of puck control add a factor to hockey which, perhaps, distinguishes it from other games from the coaching point of view. This factor is positional play. It is the element which distinguishes the well organized, well coached and successful hockey team from the shinny playing, individualized outfit which seldom completes a season with a satisfactory won-lost record.

Jack Kennedy, coach of the highly successful University of Toronto "Blues" outlines below some hockey coaching hints on the subject of positional plays:

DEFENSE

The defensemen should stay together as much as possible when meeting the attack. Much of the time, the defensemen should play as if a ten foot rope were holding them together. On the other hand, when they have possession of the puck in their own end, the defensemen should spread out and move the puck around to their advantage.

When the puck is in their own corner, one man should fight for the puck and his partner should cover in front of the net.

The defenseman in front of the net should be able to "feel" his check and at the same time always know where the puck is. He should always be in position to cut off the pass if it comes from the corner.

Defensemen should try, when possible, always to move the puck up to the top man. Too many defensemen try to stickhandle in their own end when their forwards are breaking, thus costing their team cheap goals and also discouraging the forwards from breaking out sharply. On the other hand, passes must be crisp and accurate defensemen should never give the puck away too quickly in their own end. They should be sure, then be quick.

Turn properly with incoming forwards and face the puck carrier at all times.

Switching is necessary — if one defenseman is beaten to the outside, his partner should drive for the puck carrier and let his partner, who has been beaten, go to the front of the net. In many cases this will prevent the opponent from getting away his shot.

MEETING INCOMING FORWARDS

2 forwards on 1 defenseman — play the puck — force puck carrier to the corner — delay as long as possible. Do not body check in this situation (if at all possible to avoid it). If the defenseman gets the puck he must keep possession.

3 on 2 — play the puck — force puck carrier to the corner — delay until help comes — do not body check if it can be avoided.

2 on 2 or 1 on 1 — each man take his check and play a strict man for man game. Stay with your man and play the man rather than the puck.

NOTE: IN ALL of these cases it is important to take the puck if given that opportunity.

If your wings are covered or whenever your coverage gives you an advantage in man power — the defense should step out to the blue line to force the play and play the man! This move will force your opponents into many offside situations.

Stay with your own forwards as much as possible so that you have 5 men operating together in all areas of the ice. i.e. When the puck is in the opponents' end of the rink, the defense must move up quickly to the other team's blue line in order to back up their forwards.

If the defense is slow moving up, the opposition may break out of their end very easily and at the same time leave your forwards trapped up the ice.

When playing the point position, you must be ready to back up your defense partner when play is on his side — if this occurs, pull out of opponents' end and favour your partner's side of the ice.

When playing the point, don't go for the puck unless you have a 60% chance of getting it, then move quickly.

Good point men must have the ability to pass quickly and accurately.

They should be able to shoot hard and quickly. Speed in any defenseman is an essential quality.

On defense — the defensemen should hold their sticks well out in front of them when meeting the attack. This forces the puck carrier to make his move sooner and gives the defenseman time to react with his body.

*A good general rule for all players to follow is: play the man in your own end and the puck in your opponents' end.

*The best way to discourage a good checking team is to be able to head-man the puck well.

CENTRE ICE PLAY

The centre is primarily the play maker and must head-man the puck at every given chance. Too many centres carry the puck too much, and as a result they put their wings off side and/or slow them down.

The good centre should be a good skater. Speed is very desirable but the centre does not necessarily have to be as fast as his wing men.

He should be a crisp, accurate passer and above all be willing to work hard in all phases of the game.

The good centre will lead the forechecking game at all times except when his wing man is in first. He will then take up the open wing position and keep good ice balance for his forward line.

*Feed the wings as much as possible.

*Always be skating — keep on the move.

*Follow and play the puck as much as possible.

WING PLAY

In most cases the wing men should play their game up and down their own side of the rink.

They should always be in position to check the opposing wings. They should stay on the inside of the rink (keeping the check on the boards) and skate a stride or two in front of the check.

Don't wander — stay on your wing unless it is necessary to leave. This type of steady play is what gives the defensemen the confidence they should have to play a good checking game. Stay on your wings!

Don't get caught too deep in your opponents' end unless you are top man.

Check all the way back when coming back into your own end. Don't fall off too soon. Stay with your man until play straightens out or you get possession.

In most instances you should try to play the man in your own end and the puck in your opponents' end.

Shoot quickly and often in opponents' end — this not only produces goals but creates rebounds for your teammates.

If a defenseman carries the puck into the opponents' corner, on your wing, you must fall off and take up his point position.

Try not to take a pass while facing your own net. Always try to be moving — this will help you get out of your own end of the ice. When checking your wing, keep two hands on the stick unless you can't reach your check.

Carry your stick near the ice — that is where the puck generally can be found.

GOALKEEPING

1. Of first importance is the proper playing of angles.
   (a) When shots come from some distance away, the goalkeeper should move out into the shot, thus cutting down the scoring angle sharply.
   *After having cut off the angle of the goal, the goalkeeper should then concentrate on the angle the puck takes when shot—he should never take his eyes off the puck. As can be seen, if the goalkeeper moves out closer to the shot, it is much more difficult for the opponent to score as there is now less open net to shoot at.
   This style of play is, of course, only good when the opposition is actually shooting the puck.
   If on the other hand, the forward continues to skate into the net, then the goalkeeper must back up into the net.
   By doing this, the goalkeeper makes it harder for his opponent to go around when in close.
   (b) When the play is close in and around the net (as in a scramble) the goalkeeper should now stay well in the net, so as to cut down on deflected shots and tip ins. Most goalkeepers crouch very low when in this position in order to see the puck through the legs of the players in front of him.

If a goalkeeper does not stay well in the net during scrambles many goals are scored because:

(I) He cannot see the puck.
(II) By being out of his net too far, many shots are deflected or tipped in behind him.

2. The goalkeeper should stay on his feet as much as possible. Once he is down on the ice and does not have the puck under control he is much more vulnerable to flip shots, or any other kind of shot than he was before. He is also, by being on the ice, not able to react with the same speed as when he was standing.
3. The goalkeeper should get the puck whenever he can and control it when in trouble—a face-off in the defensive end is better than giving the opposition a good scoring chance.
4. The goalkeeper should not hesitate to come out of his net (providing that he has sufficient time) in order to stop the puck and pass it up or over to one of his teammates. This, of course, can be overdone, but an alert goalkeeper may be of great assistance to his teammates in this manner.
5. The goalkeeper should never take his eyes from the puck, even when the play is in the other end of the rink.
6. A good goalkeeper can often act as a defenseman or forward in taking and relaying passes. However, caution must be exercised when making pass plays involving the goalkeeper.

IN OUR NEXT ISSUE
By Jack Passmore
Chairman of Publications

More articles will be included dealing with recreation and Miss Nancy Cannon, Vice-President for Recreation, is being asked to write the guest editorial.

Tom W. Cotie, Director, Department of Physical, Health and Safety for the Board of Education in Oshawa, Ontario, has submitted a most interesting article on "playing for safety" which will be published in two instalments.

All teachers of Physical Education will find inspiration and well documented support in an article called "Can School Physical Education be Justified?" by Robert F. Osborne of the University of British Columbia.

Maxwell Howell and Robert Morford are the joint authors of a very timely article on "Circuit Training for Secondary Schools".

Of special interest to all those employed in the recreation field are articles dealing with "Case method of teaching human relations and administration" by Earle Zeigler of Michigan University; and "Leadership for Recreation" by Andy Leigh, former Director of Recreation in Hamilton.

We are hoping to include considerable information on Branch Activities —and our Executive Secretary promises many items of interest in Trans-Canada Grapevine.

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My Visit to Canada

By ROBERT NEWTON
Senior Lecturer, Loughborough Training College, Leicestershire, England

I shall always be grateful to your President, Mr. Gordon Wright, for the invitation and the opportunity he afforded me to visit Canada for the first time. This gratitude will even extend to forgiving him for the merciless initiation I received to things Canadian. I arrived in Malton Airport, Toronto, after travelling by bus, train and air for twenty-four hours and this human dynamo who "welcomed" me, reduced me to a state where the simple process of dividing by two proved elusive. Those first days in Canada are vague and indistinct but I have a faint recollection of drinking a cup of coffee.

I have been asked to record some of the impressions of this trip. I hope I may be excused for not mentioning personally all those friends who contributed so much to my welcome, because the dominant impression was one of warmth and friendliness. Although I have had the good fortune to have seen many parts of the world, the impact which Canada made on me was so great that I soon ran out of superlatives. I could write at length about that week in the Rockies with Sherpa Affleck and the gallant assault on Rundle Mountain; the wonderful camps amidst ideal surroundings, listening spellbound to the future of C.A.H.P.E.R. and the Journal. However, time will not permit this.

The Convention at Edmonton, however, was an experience I welcomed above all. Here a visitor could recognize the vitality and enthusiasm of this representative body, and also appreciate the hopes, aspirations and ideals of people dedicated to noble efforts. I was impressed by your leaders. men of intellect and integrity, possesing a sound philosophy and liberal imaginative conception of Physical Education. One also felt it was a great pity that the full force of such ideals did not adequately permeate Canadian schools and society, because of the problems which a shortage of trained teachers presents. However one realized that the base was sound and that in the fulness of time would emerge those teachers possessing the calibre, vision and sustained enthusiasm to interpret such ideals. The important need at this stage is to establish the standards required to meet the challenge which a prosperous and somewhat materialistic society presents.

There are one or two points I would like to comment on. At first sight they may appear trivial but they do help to illustrate the differences in our two systems which yet have a great deal in common. A factor which to me was a profound shock and to Canadian teachers I met, an insuperable problem, was the real fear existing in their minds of prosecution in the event of accidents. In a challenging programme of Physical Education, accidents are inevitable. I am not suggesting we deliberately invite accidents, but I cannot envisage a programme worthy of the name, which does not accept their possibility. I met many teachers who were haunted by this fear and they excluded from their programmes activities where injuries to children were even remotely possible. Such attenuation can only be negative in terms of effect. From what I saw of Canadian youths I do not think they want this state of affairs.

A major point of contrast between our two systems was in the approach to games. In every school where American football was played the main problem seemed to be raising $3,000 and producing an elite group within a school to this end. I felt that games were never meant to be played like this, certainly not at school level. Charlotte Lambert (Eastern Illinois State College, Charleston) recently wrote on this very theme in England.

She writes "From experience I know now that there are many things in the English system which could profitably be assimilated into our philosophy and programme."

I feel convinced that our approach to games and sports in general is the right one and I'm sorry time will not permit me to enlarge on this as I would like to.

The outstanding moments of my visit were spent at the Ontario Camp Leadership Centre and the Ontario Athletic Leadership Camp administered by the Ontario Department of Education. These experiments are rich in terms of potential and are capable of still greater developments. I found it

difficult to understand why such ideal facilities were not more extensively used, especially by schools and universities. It was a privilege to work alongside such dedicated staffs led by Hart Devenney, Pete Beach, Russ Jerome and John Lees. It was refreshing to come in contact with young leaders possessing the highest ideals and qualities of character and so anxious to serve society. The aim of both centres was to develop qualities of leadership or to provide opportunities for qualities of leadership to emerge. At the Ontario Camp Leadership Centre the emphasis was on Outdoor Pursuits; at the Ontario Athletic Leadership Camp it was Athletics in a broad sense. One could recognize how the infinite variety of situations and experiences contained in one subject were used as an educational medium, potent and dynamic. I am convinced that all who attended these camps benefitted considerably. I was particularly impressed by the way in which spiritual influences permeated all aspects of camp life, how the finest qualities of young people revealed themselves as affectations and superficial veneers of sophistication mysteriously disappeared. They enjoyed being their natural selves and in so doing they seemed to acquire new and enlarged codes of behaviour and attitudes of mind. One felt that every young person in Ontario should have such an opportunity to attend.

Since returning home I have been asked all kinds of questions on Canada and my impressions, and especially what Canadian youth and children are really like. I can only speak from personal experience of those I actually met. I found them poised, relaxed, confident, courteous and who seemed self-possessed in almost any situation. At the same time, however, I felt that their potential was not sufficiently appreciated and that they would respond nobly to more exacting and demanding challenges. This feeling was confirmed at the Ontario Camp Leadership Centre and I would like to cite one example when a group of leaders accompanied me on an expedition. The weather was foul, the country was tough and almost jungle-like in character. We were going "on foot" which to the majority was a new experience. I was particularly interested in observing their reactions to discomfort and physical hardship. Would they really wilt under pressure, which certain Canadians had told me might be the case? I found these boys no different from boys anywhere back home. They loved the adventure and the sense of achievement; they wanted more, and to me they showed that they possessed the necessary fibre and resilience. As one said, "I'm glad my parents didn't come today, I might have missed this".

These boys had a great capacity for healthy fun, they were honest, generous and spontaneous. I was amazed at their mature appreciation of what real adventure meant and I could recognize something relatively untapped and yet to be harnessed. It is in many ways the answer to this materialism in the young which parents and teachers were so prone to criticise.

In Canada I was deeply conscious of being in a young, vibrant country with a great destiny. I felt that an essentially Canadian system had not as yet crystallised itself but was in the process of emerging. I am sure that whatever you decide to do will be the outcome of serious thought and deliberation and not a blind imitation of others. I could detect a reaction to certain influences at times and a growing confidence on the part of Canadians themselves. To me, Canada was an inspiration and I have enjoyed telling this to both my colleagues and students alike. The cumulative effect of meeting so many stimulating and sincere people was such that I saw new dimensions to my own work. For this I shall be permanently grateful, and I wish more exchanges or visits between our countries were possible.

Your country with its vast rivers, lakes, mountains and forest, its very spaciousness and expanse, is something to stir the imagination. Inevitably, this will be reflected in your programmes and there are already indications of this. One further tribute I would like to make is as follows. I appreciated the enhanced status and dignity being imparted to our profession through your efforts. This is apparent in the quality and width of research at your universities, the liberal and enlightened outlook of your leaders and the attention now being given to facilities in your new schools and university departments of physical education. All these make one realize very forcibly that Canada has undoubtedly major contributions to make in the future.

The Classroom Administration of the A.A.H.P.E.R. Youth Fitness Test

By

ROBERT B. WILBERG

During the past year physical fitness has become a major issue in physical education. Physical educators in the United States who became concerned about physical deficiencies in both their male and female populations developed two standardized physical fitness tests. The first test was developed for the State of New York. The second test to be developed was the American Association for Health, Physical Education, and Recreation's Youth Fitness Test. Norms common to the United States have been established for boys and girls.

The value of these tests essentially lies within their validity, reliability, ease of administration, and total cost. In particular, the physical education instructor in the class period situation will want to know the latter two points, as those points will finally determine if the test is to be used or discarded. With the above two points in mind, the physical education staff at Branton Junior High School, Calgary, administered the seven item test battery of the AAHPER Youth Fitness Test.

Approximately two hundred male, Grades VII, VIII and IX students were tested during the first weeks of school and the following items were considered important:

1. The validity of the test results when raw scores were read and recorded by students.
2. Complex and involved instructions could necessitate numerous practice repetitions before correct form is established.
3. Only a variable maximum number of students could be tested in each item at any one time or in any one room.
4. There were definite test item combinations which could be administered so that maximum usage was obtained from each class period.

*See Page 19 Re: Robert Wilberg

5. The expense of administration could limit the extent of the testing program.

The validity of the test results when read and recorded by students can be maintained in the sit-up, pull-up, standing broad jump and baseball throw tests. The raw scores in these item are discrete numbers and, therefore, require little decision or attention. The shuttle-run and fifty yard dash tests are best administered by the instructor personally. However, student recorders are acceptable when they are shown how minutes, seconds and tenths of seconds are to be recorded. The six hundred yard run-walk does not require the slip-second accuracy required by the previously mentioned running tests, and can be adequately handled by the advanced student.

Complex and involved test instructions which would have necessitated numerous practice repetitions were never encountered. There is, however, some difficulty indefining the exact extent of each movement in some of the test items. For example, some students have difficulty in touching their elbows to their opposite knees in the sit-up test. They can, however, place their elbows on their opposite thighs, without too much strain. Apparently this is acceptable but is not explained in the Youth Fitness Manual. We found that detailed demonstrations on those actions which were incorrect assisted both the student recorder and the testee to be more aware of infringements, than when we demonstrated the correct actions only.

The number of students that can be tested in one room depends almost entirely upon the size of the room. The "buddy" system of doing sit-ups, diagramed in the Youth Fitness Manual, can conserve floor space, but this conservation can be increased by placing the testees diagonally in the normal squad-file arrangement.

The number of students that can be tested per classroom period depends upon the number of students that can be tested as a group, and the length of the class period. With the exception of the sit-ups, the test

items are of short duration, with the longest test item, the 600 yard run-walk, lasting approximately seven minutes for each repetition.

All tests items can be administered accurately to groups of two or more students. With one physical education instructor, we found it necessary to run the shuttle-run and the 50 yard dash with a maximum of two testees, while the sit-ups and 600 yard run-walk tests could be administered in class size groups.

The best combination of test items that can be profitably administered in single and double class periods, to a class of 35 students are as follows:

Single periods — 35 minute duration

Sit-ups	single period
Standing Broad Jump and Pull-Ups to be run together	single period
50 yd. dash and baseball throw	single period
Shuttle Run	single period
600 yd. walk-run	single period

Double Period — 70 minute duration

Standing broad jump, Pull-ups, Shuttle-run	all indoors, double period
600 yd. Run-Walk, Basketball throw	easily accomplished in double period
50 yd. dash, Sit-ups	easily accomplished but do 50 yd. dash first

The above class period times include an interval of six minutes for shower and dress and an interval of three to four minutes for test item demonstration.

The expense of testing is negligible as all necessary test equipment can be readily improvised.

We found that the Youth Fitness Test could be administered in the Junior High School with no assistance from outside the classroom. Perhaps the best advice we can give to instructors who intend to administer this test is that the pupils will extend themselves if they are sincerely encouraged by their classmates.

About the author:

Robert B. Wilberg. Graduate of the University of Alberta, receiving a B.Ed. in physical education (1958). Received M.Sc. in 1959 from the U of Oregon. Now teaching junior high in Calgary.

EXECUTIVE SECRETARY REPORTS

Continued from Page 12

Cross. He made sure that we saw the things and people of Physical Education.

This trip to "Canada" was of value to our Association mostly because it provided many opportunities for face to face communication. At least one person has a better idea of the circumstances and problems faced in this part of the land. In Upper Canada there are many more people. On the plains while they may be larger, still you can travel more directly from place to place. And on the West Coast there is a pocket where most folks are. Each region has some answers. No one has them all.

Branches will be advised ahead of time as to the Executive Secretary's travel schedule and he will be happy to contribute upon request, in any way you see fit.

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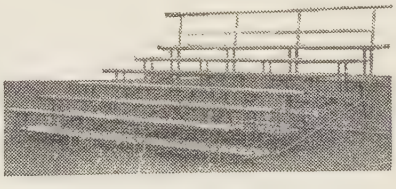

TRADING ESTATE
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Canadian Intercollegiate Athletics Move Toward National Competitions

By DR. WILLIAM A. R. ORBAN
Director of Physical Education, University of Saskatchewan
President W. C. I. A. U.

The dates November 13th and 14th will go down in the annals of athletic history as a milestone in Canadian intercollegiate athletic competition. For it was on these two days that universities and colleges from all over Canada met in a national competition in track and field, harrier and football. Probably it would have been more correct to say that nearly all the colleges and universities of Canada participated, simply because the Maritime provinces, although invited, were not represented at this meet.

There is no doubt that the University of Western Ontario, the winners of the football national championship game, can consider themselves the national intercollegiate champions of Canada in football. This was made painfully clear to us from the west because the champions of the W.C.I.A.U., the U.B.C. Thunderbirds, were convincingly beaten. This was in spite of the fact that the Thunderbirds were a well balanced team. This was based on their undefeated schedule in the W.C.I.A.U. conference.

In the same way it can be said that the winners of the different events in track and field and the cross country, or harrier as it is called in the east, can claim themselves as the national intercollegiate champions in these events. A maximum of two entries in each event from each of the conferences competed for these honors. Again only the Western Canadian Intercollegiate Athletic Union, the Ontario-Quebec Athletic Association and the Ottawa St. Lawrence Athletic Association had representative teams competing.

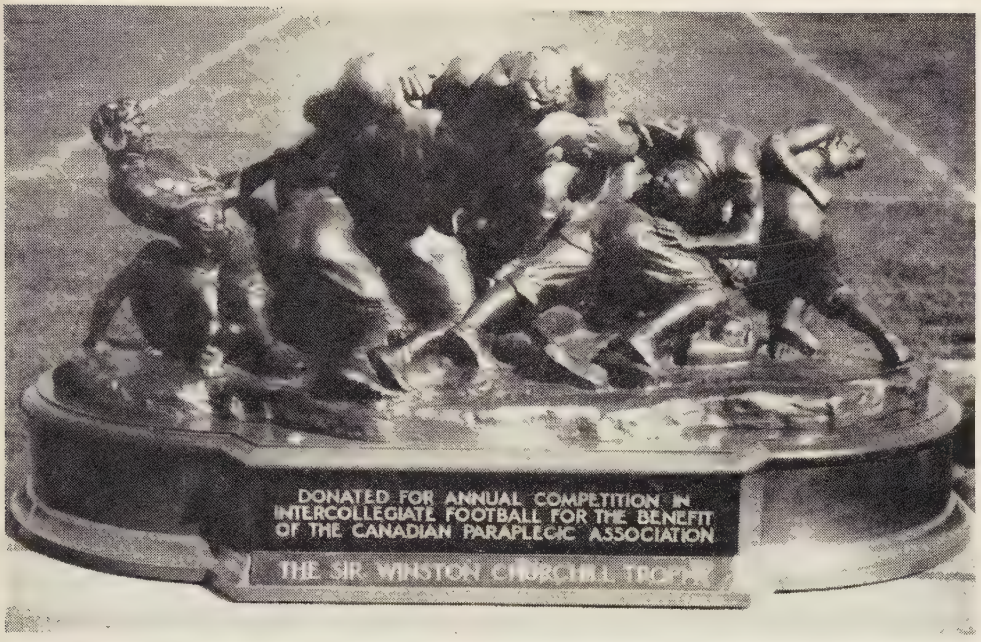
The competitions were held in Toronto at Varsity Stadium, which meant that the western athletes and representatives were required to travel to Toronto. A North Star was chartered from the Trans Canada Airlines to transport all the athletes to the east. Accommodations for all the competing athletes and representatives of the universities were made at a first class down town hotel.

NATIONAL INTERCOLLEGIATE MEETINGS

However, an event of greater importance which the newspapers all but missed, was the meeting of the various athletic associations and athletic representatives from the universities across Canada to discuss the possibility of a truly Canadian national Intercollegiate Athletic Association. This meeting took place between the representatives from the Canadian Intercollegiate Athletic Union, the Ontario-Quebec Athletic Association, the Ottawa St. Lawrence Athletic Association and the Western Canadian Intercollegiate Athletic Union. Again although the Maritime Athletic Association were invited to attend, they had no representatives at the meeting.

This meeting proved to be quite a lively one because both the pros and cons of the value of such an organization and the national championship playoffs were thoroughly aired. Although it was the intention to keep the organizational and competition aspects completely separated, this was not possible, at least not in the preliminary discussions.

This was due to the fact that national competition was very practically related to this contemplated national organization. An early discussion of the purposes and values inevitably revealed this fact. Consequently the main discussion centered around and involved aspects of national competition. Although there was no opposition to a national organization, there was rather formidable opposition to national competition. Those that opposed such competition based their arguments on the academic and financial aspects of this situation. The students, it was felt, should not be asked to miss any more classes than at the present time. An extension of the season to allow playoff competition would necessitate such absence. Secondly, at the present time national competition did not seem to be a financially sound enterprize, although there were assur-



The Sir Winston Churchill Trophy, sculptured in bronze, is a copy of the late Dr. Robert Tait McKenzie's life size football group "The Onslaught". This magnificent trophy weighs 350 lbs., is 4 feet long, 2 feet wide and 2½ feet high.

(See Story on Page 36)

ances that sponsorship of such competition could be obtained without difficulty. The opposition to outside sponsorship stemmed from the desire to remain independent and free from any obligations to any outside organization. This feeling prevailed in spite of the assurances that people would be willing to sponsor these competitions without any strings attached.

LEADERSHIP IN AMATEUR SPORTS

On the other hand, the proponents of such an organization including national playoffs felt that there was a great need at the present time for someone to assume the leadership in amateur sports. It was felt that whereas the universities were the mainstays of amateur sports around the turn of the century and up to a few decades ago; and that amateur sports as such was undergoing many changes and experiencing some difficulties because of the flourishing of professional sports. The universities are practically the only places where truly amateur sport is played on a highly organized level and where one can find the major sports played by amateurs. Their argument continued that by uniting and forming a national body, the universities could influence amateur sports across Canada and revive amateurism, particularly in hockey and football. By being unified they would have a stronger voice, could exert a greater influence on sports and provide the necessary supervision for university students who wish to participate in the various sports. In this way also it could guard the academic interests of students who enrolled in the various universities in Canada.

Only a strongly united intercollegiate athletic association would be able to get recognition from the officials of the organizations which govern our major national sports. In this way they would be able to exert some influence in the control and revival of amateur sports.

Other possible functions of a national association of this nature would be to stan-

dardize rules for the various sports. For example, at the present time the Western Canadian Intercollegiate Athletic Union football has a slightly different code of rules than does the Ontario-Quebec Association. An association of this nature could also act as a clearing house for exchange of ideas on intercollegiate programs and would be able to advise on the practicability and supervise national competition.

A resolution endorsing formation of a national body of this nature, in principle at least, was unanimously accepted. Representatives from each of the athletic associations and unions present formed a committee which will study this in greater detail. The Maritime Athletic Union although not present, are to be asked to participate in these discussions.

This committee report will be ready and available to the various unions and associations for the annual meetings in the spring. Subsequently a revised report based on the comments of these various organizations will be presented to the N.C.C.U. (National Canadian Council of Universities) at their annual meeting.

BACKGROUND OF GAMES

Because of the lack of publicity concerning the organization of this body, it would appear that the plans for these events in Toronto on the 13th and 14th of November were of very recent origin. This is not true. Although the writer does not profess to have all the facts concerning the background to this event and although many of the specific details are unknown to him, nevertheless he does have some knowledge of the ground work that was begun in 1949. It was at this time that Dr. Hall, President of the University of Western Ontario, submitted his committee report on the National Athletic Union to the Canadian Council of Universities annual meeting. However, because no action was taken on this report, it was all but forgotten about in the intervening years.

It was not until the annual meeting of the Western Canadian Intercollegiate Athletic Union in 1955 that a resolution was passed endorsing the formation of a National Intercollegiate Athletic Association. This resolution was forwarded to the Canadian Intercollegiate Athletic Union. It was not until April 4, 1959, however, that both the W.C.I.A.U. and the C.I.A.U. reopened this issue. The W.C.I.A.U. at their annual meeting set up a committee which was to study the possibilities of holding national championship competition in such sports as football, basketball and ice hockey. At the same time and without any knowledge of the action taken by the W.C.I.A.U., the C.I.A.U. passed a resolution empowering a president and a secretary of that body to carry on preliminary correspondence with the Western Canadian Intercollegiate Athletic Association for the purpose of exploring the possibility of increasing the C.I.A.U. membership.

Following the decisions there was an exchange of the constitutions of the Western Canadian Intercollegiate Athletic Union as well as the C.I.A.U. At the same time the O.-Q.A.A. and W.C.I.A.U. were exploring the possibility of a national intercollegiate football championship. This became a reality in the early part of June when a sponsor for such an event came forward. The sponsor was so enthusiastic about this venture that he was willing to not only pay for all the expenses involved in a football competition, but suggested that we should include as many sports competitions as possible. It was decided, therefore, that we would have a track and field meet and a harrier meet with the possibility of a swimming meet as well. The swimming competition idea, however, was quickly dropped when it was found that there was not enough time to select the teams for these events.

The presidents of the Ontario-Quebec Athletic Association and the W.C.I.A.U. and the secretary of the O.-Q.A.A. formed a committee which was to coordinate and organize the events that were to take place on the 13th and 14th. Finally after a great deal of correspondence, telephoning, the western contingent arrived in Toronto on the morning of the 12th. And with the exception of the weather, everything went extremely well. The wonderful banquet given by the University of Toronto officially culminated the two day competition.

FUTURE NATIONAL CHAMPIONSHIPS

The question that comes to mind at this point is what is going to happen now. Is there going to be another national championship of football next year and what about basketball and hockey? What about a national athletic organization?

Unfortunately, these questions cannot be

answered at this time. No action will be taken concerning the athletic organization and actually nothing can be done until the final report of the committee mentioned above has been presented to the N.C.C.U. Nevertheless, we can examine some of the difficulties and problems which must be resolved in order to make a national intercollegiate competition and the formation of a national intercollegiate athletic association a reality.

Because of the great distances that the various teams will have to travel for these national competitions, both missing of classes and finances becomes very important. Granted that flying has reduced the time element, it still has not eliminated the obvious financial involvement. This problem would be resolved to some extent if every university and college had a sufficiently large stadium to accommodate large numbers of spectators. Only in this way, could we be assured that sufficient amount of money could be collected through gate receipts to pay for the expenses that would be involved in such a venture. The problem at the present time is simply this: That relatively few of the competing universities have stadii which are sufficiently large to accommodate sufficiently large groups, consequently if two outside teams were to participate even in the largest stadium, there would be very little hope, as it appears in the present at least, of drawing sufficient number of people to pay for the expenses. However, this should not discourage us, for even the Grey Cup had its trials and tribulations in its early years emerging from its humble beginnings to the great spectacle of today. National competition in other sports, such as hockey and basketball, probably would fare much better but the same problem would arise to a greater or lesser extent.

TRACK AND FIELD PROBLEMS

It is quite obvious to those who live in the west that track and field meets are impossible in the fall. Winter sets in fairly early and as a result it restricts outside activities. The representative W.C.I.A.U. track and field team which competed in Toronto this year was selected on the basis of past records. This was accomplished at a meeting of the representatives from the four western universities. As a result some athletes may have been unfairly eliminated from the team while the performance of others highly over-estimated.

Because the eastern colleges play football under a different code of rules than the west, some compromise had to be made concerning the rules to be used for the national championship game. It was agreed that the Western Canadian Intercollegiate Athletic rules which allow more blocking were to be used.

Another problem that arose was the matter of trophies. The University of Toronto graciously offered to supply all the track and field trophies to the winners of the track and field event and the Toronto Daily Star offered to purchase a trophy for the W.C.I.A.U. championship. This generous offer was declined, simply because the west has the Hardy Cup, which is emblematic of the W.C.I.A.U. football supremacy.

There was no problem concerning a national championship trophy because the Churchill Cup, which had been competed for by the University of British Columbia and an Ontario-Quebec Athletic Association football team for the past seven years, was made available. Although the Churchill Cup was not originally intended for a national competition, nevertheless the Paraplegic Association, under whom the previous competitions were sponsored, presented this cup to the champions — winners of this game.

Although there is a great deal of work yet to be done before we will realize an annual Canadian Intercollegiate national championship playoffs in all the sports, including a national organization to supervise these sports, nevertheless everyone has great hopes that they are not far off. If the response of the committee to this challenge is any indication, we can expect some action — soon.

* * *

"Take a real interest in the future — that is where you are going to spend the rest of your life".

SUMMER STAFF REQUIRED
ALBERTA RECREATION LEADERSHIP SCHOOL
JULY 4 to JULY 30, 1960

The Government of the Province of Alberta, Department of the Provincial Secretary, invites applications for the staff of the 1960 Recreation Leadership School, to be held in Red Deer, Alberta, July 4 to July 30, 1960.

Staff members must be willing to live in residence at the Composite High School dormitories and to act as counselors to a group of students.

Salary up to $360.00. Free board and room is provided in the High School dormitories.

Applicants must be well qualified to teach at least three of the following subjects:

- Principles of Recreation
- Group Games
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- Community Singing
- Square and Social Dancing
- First Aid
- Quick Crafts
- Gymnastics
- Team Sports
- Creative Drama
- Keep Fit
- Sports Administration
- Social Recreation
- Individual Sports
- Sports Officiating
- Swimming (Red Cross Instructors' Course)
- Analysis of Exercise

Interested persons should apply prior to March 1st, 1960, stating qualifications and subject preference to:

Miss Elsie M. McFarland,
Supervisor,
Community Recreation Bureau,
Cultural Activities Branch,
425 Legislative Building,
Edmonton, Alberta.

THE PROVINCE OF ALBERTA

The Women's Athletic Committee

A MESSAGE FROM CHAIRMAN, FREDA WALES

At the CAHPER Convention in Edmonton in June, I rather hesitatingly accepted the position of Chairman of the Women's Athletic Committee of CAHPER. I am rather apologetic at the time lapse since this election took place, but now that the wheels have started to roll I am looking forward to constructive work being done by this committee.

PROVINCIAL REPRESENTATIVES & THEIR DUTIES

It was decided to have ten provincial representatives through whom all the work of the WAC would be channelled. The duties of these provincial representatives would be to coordinate and channel W.A.C. Business from the National WAC Executive to appropriate local groups.

The following provincial representatives were elected subject to their acceptance:

Newfoundland — Miss Tomi Gerstman, Memorial University

Nova Scotia — Mrs. Pat DeMont, formerly St. Pat.'s H. S., Halifax

New Brunswick — Miss Pauline Cunningham, Division of Physical Education & Recreation, Fredericton

Prince Edward Island — Mrs. Irene Ferguson, Summerside

Quebec — Miss Peggy Walker, MacDonald College

Ontario — Miss Alice Trevis, Ntl YWCA, Toronto

Manitoba — Miss Marion Crawford, Winnipeg

Saskatchewan — Miss Jean Leiper, Saskatoon.

Alberta — Miss Ruby Anderson, U. of A., Edmonton

British Columbia — Miss Barbara Schrodt, U.B.C. Vancouver

NATIONAL WAC EXECUTIVE

The National WAC Executive was elected as follows:

Chairman — Freda Wales, Halifax

Basketball Chairman — Miss Pat Lawson, U. of S., Saskatoon

Volleyball Chairman — Mrs. Gwen Anne Vernon

Aquatics Chairman — Miss Gladys Bean on leave of absence from McGill University

Journal Correspondent — Miss Jean Forster U. of T., Toronto

OPERATING CODES

It was agreed that there was a need for an operating code for each chairman. The outgoing chairman will be asked to outline what they consider to be the duties of their positions. This list is to be forwarded to the W.A.C. Chairman to be refined and given to the present chairman.

MINUTES OF EDMONTON MEETINGS

I hope that all of you will be able to act in your appointed positions. This letter, I trust, will give you some idea of your responsibilities. You will be able to read the minute of the business meetings of the WAC in the proceedings of the National Convention which are being prepared and published by the Edmonton group. These minutes will serve to fill in the gaps.

REPORTS — STANDARDS AND POLICIES

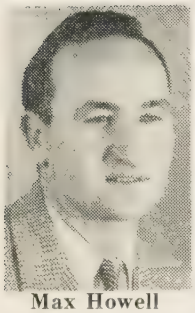
As another bit of background information, I might mention that the women in each CAHPER branch had been asked last year to prepare a report on standards and policies in women's athletics. Reports on the following were presented at the meetings in Edmonton:

1. Standards in girls' games and athletics used in Ontario Secondary Schools (for information only).
2. Standards in officiating — Maritime Branch.
3. Track and Field — Calgary Branch.
4. Gymnastics — Greater Montreal Branch.
5. Field Hockey — Report presented by Mrs. May Brown.
6. Curling — Report presented by Miss Mary Hendrickson.

These reports were received as preliminary studies and work will be continued by the same group or referred to a new committee. They will be published in the Convention Proceedings.

Generality Versus Specificity in Motor Learning

By
MAXWELL L. HOWELL
Dip. P.E., B.A., M.A., Ed.D., F.A.C.S.M.
and
PETER M. MULLINS
Dip. P.E., B.Sc., M.Sc.


Max Howell

In nearly all books on curriculum in Physical Education for teachers there are certain skills selected to develop coordination, rhythm, agility and so on. It is assumed, then, that there are certain activities which will develop overall agility — that there are certain activities which will develop overall rhythm — and so on. Is this basic assumption of curriculum planners experimentally founded? Is there, for example, a general factor called coordination? Is it possible to justify the concept of a unitary function such as coordination? Or, rather, is coordination specific to the task or activity. In other words, is there a single concept such as coordination or are there not just various coordinations, each specific to the task.

What, then, is some of the evidence on this subject?

The psychologists have known that motor skills are highly specific for some time. That is, the ability to do one thing well is not related to the ability to do another well. Much of the definitive work was done by Robert Seashore in 1940 (35) and Harold Seashore in 1942. (33)

Seashore, Buxton and McCollum (37) brought together some twenty-one tests of fine motor skills which included simple reaction time, simple and complex tapping rates, several high speed coordinations, and form board and assembly tests of mechanical abilities. Out of some 200 intercorrelations only 27 were above 0.49, with an average of approximately 0.25. If there were a "general coordination" factor in fine motor skills one would expect the intercorrelations of the tests to average much higher.

In a study based on 52 college males, Cozens (6) intercorrelated the results on a battery of tests involving large muscle coordinations, such as arm, shoulder, hand-eye, foot-eye, arm-eye, leg and general body coordinations. The tests involved throwing, running, catching, kicking, jumping and various strength and agility tests. The resulting intercorrelations were lower than what could be expected should a "general coordination" exist for large muscle skills. For example:

(a) football pass/accuracy vs. basketball throw/goals — .231
(b) standing broad jump vs. standing backward jump — .282

Only some of the most similar skills were correlated very high, for example:

(a) baseball throw/distance vs. football pass/distance — .656
(b) 100 yard dash vs. 120 yard low hurdles — .633

But then one should expect the intercorrelations to be even higher in these cases, were it not for the evidence pointing to the high degree of specificity in every physical skill.

Nearly all the activities commonly called large-muscle activities involve some fine-muscle coordinations as well. However, it does not follow that high ability in fine motor coordinations must be positively correlated with high quality of gross motor coordinations. In an experiment dealing with both fine and gross motor skills, Harold Seashore (33) exposed 103 college freshmen over a 9 week period to a series of 25 fine and gross motor ability tests. The intercorrelations demonstrated the essential independence of fine and gross abilities (average $r = 0.25$) substantiates the specificity as shown by Cozens.

In some of these experiments it might be contested that the specific character of the motor skills is due to lack of sufficient practice in the measurements usually considered. A study by Buxton and Humphreys (4) provided some evidence against such an argument by showing that extensive additional practice upon motor skill tests (fine),

supposedly approaching capacity performance, does not produce any significant increase in the intercorrelations of fine motor tests.

It has sometimes been argued that children start out with a general coordination which becomes gradually differentiated with further anatomical development and training. However, according to experiments on subjects of various ages (2, 6, 10, 16, 18 and 20 years), intercorrelations of standard motor skill tests gave the same low results. (21, 33). Gates (11) gave 50 kindergarten children (age 4½-6 years) seventeen tests involving card sorting, tapping, hole punching, and various dexterity tests such as putting marbles in slots. 136 intercorrelations gave an average $r = 0.42$, which is considerable higher than adult averages. However, many of her tests were almost identical (some involved just change of hand, or reversing direction and distances). She concluded however, that motor speed and dexterity are highly specialized among young children to about the same degree as in adults.

One study, of the first three years of life (by Bayley), however, did show slightly greater "commonality" during the first few months, with specificity later on. (36)

Some of the possible factors causing a wide divergence of coordination ability were studied by Rarick and McKee (31) in a study on 172 third grade boys and girls. After giving a series of tests of physical skill they compared motivational, environmental, and training backgrounds of the 10 highest and the 10 lowest subjects. One of the most significant findings was the fact that 80 per cent of the parents of the high motor skilled group participated in play activities with the child while the parents of the low-skilled group participated 0 per cent. This may indicate the presence of more adequate early training and stimulation as an aid to developing a greater number of the specific skills.

Owen's results (29) on practising mechanical ability tests with Junior High School boys (only 15) stressed the uniqueness of motor skills at that age level and indicated the theoretical efficiency of early specialization.

On the basis of some of the previously related investigations involving specificity of coordination, performance of an individual in one type of physical activity games but slight indication of the rank he will hold in the performance of another task. These results have been taken to mean that, in a given motor-coordinated task, elements specific to that situation play the most important part in determining the performance, and that there is little transfer from that activity to coordinated action in another. Transfer is highly specific and occurs only when the practiced movements are almost identical.

Lindeburg (24) used 47 high school boys and girls, divided into four separate groups. They were tested during the first three weeks of the school year. A period of approximately two months followed during which each group received a different type of physical activity. Each subject was then retested. The physical activities selected for practice between tests included the game of table tennis, special arm and quickening exercises, and a regular physical education class program. Three tests, namely finger-

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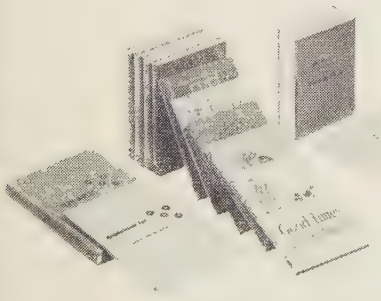

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press, peg-shifting, a modified peg-shifting were selected in order that it might be determined from what physical activities and to what degree transfer could occur.

Group A refrained from physical education participation during the course of the experiment. Group B had table tennis only, at least three times a week, and no other physical education was allowed. Group C was a regular P.E. group who took part in calistenics, touch football, basketball, tumbling, and mass games. Group D was a regular P.E. group who had the same activities as Group C with the difference that three special arm exercises were substituted for the calisthenics. Two of the exercises, arm extension and the Randolph shuffle, were given at the beginning of each period. The third arm exercise, consisting of rapid coordinated movements, was added at the fifth week. The number of times each exercise was practised increased progressively from 20 per period at the beginning to 40 per period at about the 8th week. The group did the exercise in unison, with each movement being robust and brisk. The boys were encouraged to make each movement as lively and forceful as possible.

It was found that there was no transfer of training from the activities of table tennis, regular P.E. or special arm exercises to coordination efficiency in the finger-press, normal peg-shifting, or modified peg-shifting, as measured by speed of movement. Evidently, a significant transfer of training does not occur when some of the movements are similar as is the case in the special arm exercises and modified peg-shifting. Instead, the results agree with the theory that transfer is highly specific and occurs only when the practised movements are identical. Definitely *disproved* was the theory that "quickening exercises" or sports activities (such as table tennis) that involve many rapid skillful movements improve the individual's general coordination.

What then are some of the implications of all this evidence? As Henry states (14, p. 1):

> By their actions, it is clear that our curriculum planners would spell coordination with a capital C — certain activities must be included in the school programs because they develop The Coordination. On the other hand, the evidence from controlled research gives no indication that there is any quantitatively unitary function that can be called general coordination. On the contrary, it must be conceded that coordinations are highly specific—it is largely a matter of chance whether an individual who is highly coordinated in one type of performance will be well or poorly coordinated in another. This does not of course exclude the possibility of a few "natural athletes" who are so fortunate as to be gifted with a large number of specifics, or the "motor moron", that unfortunate individual who has few or none.

But, as Henry goes on to say (14, p. 2):

> There is no need, however, for us to develop an inferiority complex when we have satisfied ourselves that the high school boy or girl who learns to play basketball has learned, not general motor coordination, but *basketball.* The role of sports and games in our culture is not lessening but increasing. It is just as important to know some sports activities as it is to know how to play the piano or to paint an expressive picture. Some individuals will derive personal satisfaction and sociological values from one, and some from another.

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ARCHERY IS FOR EVERYONE?

ZERADA SLACK
Director of Athletics and Physical Education — Women
University of Toronto

A well known archery tackle firm in the United States has as their slogan, "Archery is for everyone". The tremendous increase in the sale of equipment, the amazing growth of archery clubs all over the country and the wonderful improvement in the techniques of shooting all lead one to believe this slogan. Most people when they see a bow and arrow feel all they have to do is put the string on the bow — somehow — and let it go. They forget that, like everything else, when an activity is done perfectly, it appears easy. As a matter of fact, archery is difficult, both to teach and to learn. True, like everything else, one can hit a certain standard fairly quickly. One could get somewhere on a 48" target at 15 yards, just as one can appear to be swatting flies and call it badminton, but this is not badminton and it is not archery in its true sense.

I began archery some 30 years ago with a group of Class D students, that is, restricted in activity. It was not long, however, before the activity caught on and began to attract the stars of the basketball team, the track and field experts and the best swimmers, in short, those students in the top A category. We ended by having any and all students who were interested. But I noticed then, as I have observed since, that only certain people will become expert archers.

NO SPORT FOR WEAKLINGS

This sport is not for the weakling, and I am shocked and grieved to note the number of women students coming up to us with such marked weakness of the shoulder girdle and upper back. It is a source of satisfaction that this area improves so well, as a result of this activity but in the learning stages this weakness results in great frustration for the student. Some girls can not pull 8 lbs. 16 lbs. is the lightest bow we have and most inaccurate because it is so slow. Also, we have some students whose co-ordination of arm and eye is so poor that even average results are impossible. We have students also whose eyesight with or without glasses is poor. It is difficult enough for a normal eye to pin point the centre of the gold at 50 yards.

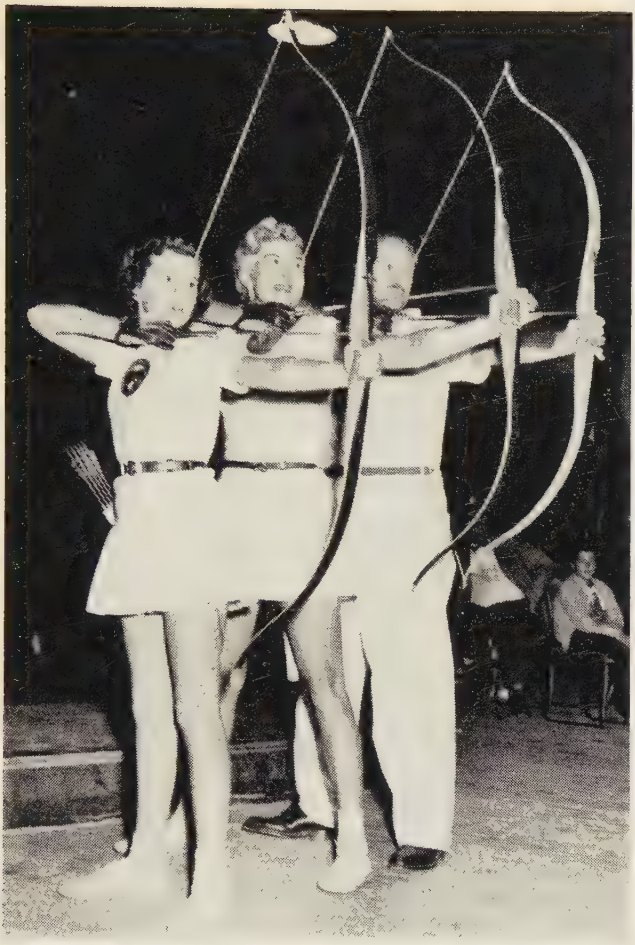
Then too, there are those students who lack the 'stick-at-it-iveness' necessary for a good archer. 99% of the errors in archery are caused by the archer herself and, therefore, if she is not willing to analyze her form continually and make corrections she will not improve. The activity, moreover, requires infinite patience; patience to get the feet, the hands, the arms, the eye, the string, and the nose exactly right. "Almost right" is not good enough because the secret of good shooting is keeping everything, yes, **everything** consistent. From the position of the feet to the time of the sight, everything must always be the same. This necessity to pay attention to detail is difficult and irksome for some people. These people will not make good archers.

And so, by now, you must have come to the conclusion that I do not believe "archery is for everyone". True, any boy or girl can pick up a bow and arrow in Woolworth's and shoot the arrow so it will land "I know not where" nor does anyone else. But this is not archery. This plaything is to archery as ping pong is to table tennis.

WHAT ARE THE BENEFITS

Let us consider the real sport of archery and I shall deal with target shooting only, though flight, clout, field and golf are also in the repertoire of a good archer. What benefits may result from this sport? Strange as it may seem to the novice the most obvious result is increased strength of the shoulder and upper back. We have 120 students taking archery at the University. We have 40 bows varying in weight from 16 to 35 lbs., that is, whenever a students pulls a 26" arrow she is pulling from 16 to 26 pounds. This represents a lot of work. The students begin always with light bows and even with these they groan and grunt and only with difficulty acquire a good position. But after six or eight lessons they use their

"Good Equipment is Essential"



"Perfect Form Desirable"

Picture courtesy of Archery Craft, 2588 St. Clair Ave., West, Toronto, Ontario

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bows as featherweights and they begin to ask for heavier ones. The heavier ones are more accurate and many end the session by using 28 — 30 lb. bows.

Similarly with their arrows; they are measured for their arrows according to their arm length but few are able to pull their proper length in the initial stages. Eventually they do and they do it evenly and gracefully. Even with one lesson a week the increase in strength is noticeable.

The nature of the equipment and the technique require that the archer assume a good posture at all times; even weight distribution on the feet, a straight back, flat abdomen, shoulders flat and head erect. Any deviation in any one of these items will spoil a good aim.

RELAXATION ESSENTIAL

The good archer, too, must be able to relax. There is tension only a few moments in the action of shooting and this is followed always by relaxation. Mentally, also, the archer must be able to relax. It is a gruelling business to have to finish up the last on a shooting line and be the focal point of all eyes. It is then that a lack of tension really pays off.

From the point of view of mental health much can be said for archery. To strive so hard to make a perfect end, get 5 golds, and then have the sixth arrow in the red is surely cause to break the bow across one's knee! I have never seen an archer do this but I have seen a golfer break his club. One never really knows where an arrow is until one examines the target. Disappointments then, must be faced with equanimity and calmness. In archery one gets a great deal of practice in accepting defeat and disappointment.

The only way to improve is to persist. I am amazed frequently at the persistence of students. They just never give up. They practice at 8:00 a.m. in a temperature of 40 degrees, they practice at lunch hours and eat as they pick up their arrows. When time is up they plead for "just one more end". I think there is much to be said for such persistence.

I think the sport takes courage. The bow is a lethal weapon, an awkward piece of equipment unlike our usual bats, balls and racquets and for the beginner, sore fingers, a cut on the bow hand, a bruise on the elbow, a sore chin, and very stiff arms and shoulders are not uncommon. The gentle sport of archery is a misnomer. It is no such thing! It is difficult to do and one can easily be hurt.

One must acquire patience and forbearance. Especially is this true in competition when one is doing well and wants to get on with it. But no, one must wait until the last archer is finished and sometimes that archer takes ages! But under no circumstances would an archer by word or deed convey her impatience in any way.

CONFIDENCE COMES WITH SUCCESS

As in any other sport, confidence comes with success. So it is important that in the initial stages, indeed the first day, a student should get on the target, even if it is a 48" target and she is only 10 yards away! I wonder that anyone even becomes interested in archery when I see instructors spending all of the first lesson, and even the second, stringing and unstringing the bow. Stringing the bow is a knack not a question of strength. Don't waste time on it in the initial stages. It takes you, as an instructor, about 10 seconds to string a bow so get the bows ready and have them strung before the class assembles, so that time can be used for shooting. I have found that if students shoot three or four days, they are then anxious and willing to take time to string a bow. But, "Get on the target the first day".

One of the irksome jobs about archery is the constant repair necessary. Even the best archers will sometimes break equipment. Most common, of course, are the nocks and the points coming off the arrows. Do this yourself in the initial stages. It is frustrating for beginners to have to stop shooting within 10 minutes of starting. It is better to take part of the fourth or fifth lesson and go over repairs with the members of the class. From then on they are responsible for their own repairing. If an arrow needs a nock they withdraw from the shooting line and repair it. It is remarkable how quickly the best archers can repair and get back to shoot.

I find it effective to introduce novelty shoots, early and often: William Tell, Split the Wand, Balloons, 48" 24" 18" and even 9" targets, numbers, pumpkins, hearts, Santas and shamrocks. A prize works wonders, especially an apple, though a lollipop is

(Continued on Page 35)

AN EXCITING NEW ADVENTURE IN HEALTH EDUCATION

Mediscope

By ERNIE SHIPTON
Director of Physical and Health Education, East York Collegiate

Early in October the Ontario Medical Association presented a one-week medical exposition which received overwhelming public support. The exposition was held in the new Queen Elizabeth building of the Canadian National Exhibition grounds in Toronto. This extremely ambitious Health Exhibition was boldly conceived, and very successfully executed. During the week 5,800 members of the Ontario Medical Association were hosts to nearly 200,000 people of all ages who wanted to hear and see the latest methods and techniques used in the diagnosis and treatment of injury and disease.

This was Canada's first all-medical exposition. One of its foremost objectives was "to promote the public health". In order to meet this, and many other worthwhile objectives, doctors were on hand at all exhibits from 10.00 a.m. to 1.00 p.m. each day of the week. These doctors answered questions and explained, in easily understood terms, many aspects of the more than 45 exhibits.

At many exhibits the public were not only observers but active participants. Visitors were able to hear the sounds of a heart beating; many had their hearing tested; and thousands received the skin test for tuberculosis.

One of the most interesting displays was on athletic injuries, their treatment and prevention. This exhibition was planned by a special committee under the chairmanship of Dr. Harry Ebbs, Director of the School of Physical and Health Education, University of Toronto. Mr. G. A. Wright, our CAHPER president and Mr. N. A. Beach, Advertising Manager of the Journal, were also members of the committee. Such injuries as shoulder separations, sprains and broken bones were shown in X-rays, diagrams and models of simulated casualties. The part played by conditioning and proper

equipment in the prevention of injury was emphasized.

Stressed also was the importance of exercise in the rehabilitation period following injury. Many a teen-age girl was observed, standing before the exhibit, with rapt attention, as her football hero explained with the aid of X-ray and diagrams, the treatment of his gridiron injury.

One of the great highlights of Mediscope was the Transparent Talking Woman. This "Woman" was displayed in the 1,350-seat auditorium of the Queen Elizabeth Building, a beautiful setting in which to observe a magnificent scientific achievement.

This young lady was specially constructed for Mediscope '59 by curators of a health museum in Cologne, Germany. She is 5'7" tall and all other measurements are those of a 28-year-old German woman. As the model "spoke" she described various organs and bones of her body which lit up in sequence. Her network of arteries, veins, nerves and lymphatic system is in red, blue, yellow and green plastic coloured wire. Her bones are of metal and her lighted organs are of plastic, scientifically correct from sculptured models.

The model took the audience on a tour of the human anatomy, stopping in sequence at her larynx, thyroid gland, lungs, heart, liver, gall bladder, spleen, pancreas gland, stomach, small intestine, colon, rectum, kidneys, bladder, ovaries and the uterus.

Women were again in the spotlight in a display that described the birth of a baby. The exhibit stressed the importance of prenatal care and demonstrated the improvement in the care of the mother at childbirth. The display also dealt with some of the more common complications of childbirth. The exhibit ended with a demonstration diagrams of a Caesarian operation.

Next to this exhibit was a section on "Infant and Child Care". Here a thorough explanation of Rh incompatibility in a newborn child was given. Among the other problems of the newborn child the two most common are breathing difficulties and prematurity. The visitors were shown bassinettes and the latest incubator for premature babies in which proper humidity, temperature and oxygen are carefully controlled, reducing movement and strain of the weak infant to a minimum.

In conjunction with the child care theme, there was an exhibit which showed the function of a poison control centre. Guests to this exhibit were given valuable informative folders pertaining to the care and prevention of poisoning among children.

Of particular interest to teachers of health were exhibits covering home accidents, teenage diets and inoculations. Some interesting facts concerning teenage diet were revealed in a two year survey in Metropolitan Toronto. 55 per cent of teenagers in the survey drank too little milk; 71 per cent had no vitamin D; 53 per cent had no egg; 64 per cent had no whole grain cereal; 43 percent had no yellow or green vegetable; 31 per cent had no citrus fruit or juice. The survey concluded that seven out of 10 teenagers eat inadequate meals. The teenager was encouraged to read a recommended daily diet and compare his or her daily consumption with the startling figures on daily consumption quoted in this paragraph.

In line with the medical profession's efforts to keep the public fully informed on all aspects of cancer and its treatment a vast circular mural 85 feet long was devoted to this purpose. As sections of the mural were illuminated one by one, visitors heard stories of cancer written by 5 outstanding Canadian doctors.

As the visitor left the "Cancer Cyclorama" he was shown some aspects of research which showed what is hoped for in the future.

Of particular interest to the secondary school student was a section devoted to careers in the field of health. There were displays covering the following career areas — occupational therapy, physiotherapy, X-ray technology, laboratory technology, medical record library, nursing, medicine, public health, dentistry and pharmacology.

Wonder what the family doctor of 100 years ago looked like, what kind of surroundings he worked in, how he kept abreast of medical discoveries?

The answers were supplied in a 40-foot exhibit which took you back 100 years to 1859 and by a series of 20-year periods, showed you medicine's progress in both discoveries and facilities.

As a matter of interest the display revealed the fact that the rent of a house in 1859 was $7.00 per month; life expectancy for a baby boy born in 1859 was 38.91 years, and for a girl, 41.85 years. This same life expectancy today is 66.33 years for a baby boy and 70.83 years for a girl.

Mental health was not neglected in the '59 Mediscope. The visitor was conducted on a trip through the "house of horrors", where authenticated methods of treatment of the mentally ill during the "dark ages" were shown by eerily lighted corridors containing manikins locked up in cribs for the insane, strapped to chairs and falling

through a trap door into a pool of water. From the "dark age" the observer emerged into brightness and a demonstration of present-day methods used in the treatment of the mentally ill.

Even crime detection was given some attention in Mediscope '59. The visitor was shown how the "test tube detective" could begin the solution of a crime from the very slimmest of clues.

During the course of the exhibition a movie theatre carried a programme of 20 films which dealt with a wide variety of topics in the field of public health such as, "Alcoholics and the help they need', high blood pressure, strabismus, cancer, home accidents, and water fluoridation.

One Toronto newspaper said,"The Ontario Medical Association's exposition, Mediscope '59, was an unqualified success. The O.M.A. is entitled to feel gratified by this overwhelming public response to its enterprise in organizing the show. It can also take credit for a thoroughly worthwhile experiment in public health education and public relations for the medical profession."

The article further states that "the O.M.A. hopes that it will be possible to take the show to other Ontario cities next year, and visiting health experts from Manitoba and Quebec have shown interest in staging similar exhibitions."

Let us hope that these officials meet with success so that many people across the country will be able to view such a worthwhile experiment in public health.

ARCHERY IS FOR EVERYONE?

(Continued from page 32)

equally acceptable. I find also that one should keep archers on the same shooting line for a day of two and only when they are proficient, to move them. Mentally one must give time for a habit to "set", as it were.

A SPORT FOR A WHOLE FAMILY

Though archery, because of its difficulty, may not be for everyone, it can become a very happy family sport. It is like bowling in this respect, where one can aspire and achieve from the age of 9 to 90. The equipment may be adapted, the competition is comparable and the satisfaction is great. To me the satisfaction is an inner one. This is no sport for the exhibitionist. There are no professional archers and tournaments draw few spectators but the improvement and the achievement as one shoots with diligence is a most rewarding experience. In this connection Roger Ascham, the tutor to Elizabeth I has summed it up as follows: "It is an exercise most holsome for the bodye, a pastyme most honeste for the bodye, a pastyme most honeste for the minde; and, as I am able to prove myselfe, of all other most fitte and agreeable with learnynge and learned men. Therefore, I not only love shootynge, prayse shootynge, exhorte all other to shootynge, but I also use shootynge."—

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THE SIR WINSTON CHURCHILL TROPHY

By R. J. PHILLIPS
Director of Athletics, University of British Columbia

Interest was aroused recently in the Sir Winston Churchill Trophy, when it was presented in Toronto to the University of Western Ontario Football Team as winners of the first Canadian Intercollegiate Football Championship. The "Mustangs" had defeated the University of British Columbia "Thunderbirds" at Varsity Stadium on November 14th by the decisive score of 34-7.

When I was in the East attending the game I was surprised to learn that a good many University people were unaware of the fact that the Sir Winston Churchill Trophy has been in existence for seven years. Because the magnificent 300 lb. trophy was a copy of Dr. R. Tait McKenzie's sculptured figure, "The Onslaught", it is of special interest to those in physical education who know of the contribution Dr. McKenzie has made in this field.

The Canadian Paraplegic Association (Quebec Division) agreed, in 1953, to sponsor the first of six East-West Intercollegiate football contests, involving McGill, Western Ontario and the University of British Columbia. The man who was mainly responsible was Dr. Harold Elliott of Montreal, a key official in the Paraplegic Association and an eminent neuro-surgeon. It was his hope that proceeds from the games would help in the rehabilitation of the seriously disabled from coast to coast, and at the same time serve to bring Canadian Universities closer together by participating in friendly competition.

The Principal of McGill, Dr. F. Cyril James, obtained permission from Sir Winston Churchill to have the trophy bear his name. The Montreal Museum of Fine Arts and the University of Pennsylvania agreed to let a copy of the "Onslaught" become the trophy for this competition.

A permanent record book containing the signature of Sir Winston Churchill accompanies the trophy and after each game the names of the contestants and officials are added. In the foreward, Dr. James said:

> The desire to assist the paraplegic veterans of the Armed Forces inspired a happy concatenation of ideas. An annual football game to be played on the anniversary of the Battle of Britain at the Stadium that bears the name of Percival Molson who was one of McGill's most gallant athletes. A trophy designed by Tait McKenzie, whose contributions to physical fitness in war and peace were alike outstanding. A contest between teams representing East and West to symbolize the growing solidarity of our country. Sir Winston Churchill enthusiastically accepted the suggestion that this trophy should bear his name in testimony of his warm good wishes to these contestants, playing for the joy of the game in happier circumstances, whose names are inscribed on the following pages.

While the first six games played between 1953 and 1958 were pre-season games it was the desire of Dr. Elliott to establish a Canadian Intercollegiate Championship, and when this became a reality last November, he expressed the hope that this would be the commencement of an annual competition.

(See Picture on page 21)

ABSTRACTION

No stick, no stone, no blade of grass
or greenery.
No tree, no fence, no scenery.
No loaf of bread, no jug of wine,
No thou.
No bough.
No flower, no bee to sting,
No any kind of anything.
No cow,
nohow!
No cloud, no shade or shine, no umbrella.
No girl — no fella.
No wishing well, nothing at all to tell.
No life, no impression,
No vastness or depression.
No thing implied, nothing decried.
No heap of bones, no stones.
No feeling or emotion,
No notion!
No mill or mountain rill.
No still.
No horse and cart, no any style of art.
No furniture or fixture—
No picture!
No Apology No Name

(From **Leisure**, the magazine of the Cultural Activities Branch of the Government of Alberta.)

TRANS-CANADA GRAPEVINE

By C. R. BLACKSTOCK

The East-West Intercollegiate rugby game, played in mud and water in Toronto, besides bringing together two good teams, brought representatives from the athletic departments of the universities to one place. They explored further verbally, the possibilities of a National Intercollegiate Association.

* * *

At the Canadian Conference on Education meeting in Montreal, it was suggested that physical education could contribute to a fuller use of school days in June. This might be done through school camp experiences or outdoor education projects; learn to swim programmes at community pools; or sports days involving more than one school.

* * *

Artificial resuscitation is being studied thoroughly at the University of Saskatoon. Under the direction of Drs. Brook and Dobkin the relative efficiency of each of several methods has been demonstrated. The mouth to mouth or "rescue breathing" method is clearly the most efficient so far as ventilating the lungs of a "victim".

* * *

Newfoundland and the Maritime provinces changed the name of their Association at the meeting held in Halifax in mid-November. They are now to be known as the Atlantic Provinces Association for Physical Education and Recreation (APAPER).

* * *

Two studies of which we know are being made at U.B.C. graduate school. These will be of general interest to members once they are reported.

Mrs Linda Shore is making a comparative study of the Methods and Course content, as used by the ten Divisions of the Canadian Red Cross Society, in preparing instructors for its Water Safety Service.

The other is "Planning a Camping Programme for Junior and Senior High Schools."

* * *

There are rumors of quite a number of studies being done using performance tests and efforts to set up achievement scales. We hope readers will let the Executive-Secretary knew of these and who is conducting them. Certainly, the Chairman of Publications will be pleased to report such studies and summaries of results or conclusions.

* * *

Those interested in ski instruction will be interested in seeing the series of articles which appeared in several issues of the late fall of Sports Illustrated. There are excellent "sequence drawings" that convey the "message".

* * *

A well known Toronto morning newspaper carried a series of five articles on the editorial pages titled "Hypocrisy of Amateur Sport". The author Walter Gray used Canada's representative to the coming Winter Games as the example. It is clearly shown that we haven't really faced up to this problem either at home or internationally. How proud can we be.

* * *

"Civic Recreation and Parks Record" reports that approval has been given to a document titled "Organization of Community Recreation in Ottawa. It offers a plan for those newly organizing groups and indicates modes for relating with other groups.

* * *

The Canadian Lawn Bowler editor, Sydney Gillate discussed in the February 1959 issue the creation of a "Ministry of Sport". Bowlers take part in the Commonwealth Games and some other international events. Mr. Gillate indicated that where Canada is represented in any sports event it becomes a matter of national concern. A sports ministry could assist in assuring proper representation and financing which might be a joint arrangement between the Ministry and the sports concerned.

* * *

Delbert Oberteuffer, Ohio State University, received the Luther A. Gulick Award from the A.A.H.P.E.R. at the annual meeting 1959. This is the Association's highest and most cherished award. Canadians who know Dr. Oberteuffer, and there are many, join in extending their congratulations to him.

The Canadian Y.M.C.A., with the guidance of Wes. McVicar, National Secretary for Physical Education, has staged two very successful Conferences at Geneva Park in the summer for Jr. Leaders' Corps. The dates for the third Conference are July 3-16, 1960. Young men from across Canada are finding this a fine training experience for volunteer work in the Y.M.C.A.

* * *

From the pages of the Canadian Association "Bulletin", early forerunner of our present Journal we learn that the Association was connected with the "Golden Jubilee of Basketball". The President, Miss Florence Somers, announced in the December 1941 issue that Merl Harding of the Y.M.C.A., and Miss Dorothy Jackson would be our representatives for this year of celebration to be paid to basketball.

* * *

The Basketball Hall of Fame in Springfield, Mass., which in 1941 was a dream has been realized now. Dr. James Naismith who devised the game in 1891 at Springfield was a Canadian from Almonte who preceded R. Tait McKenzie to McGill as a student and director of the gymnasium there.

* * *

The Executive Secretary will be in the West from about February 18th. He goes to B.C., first. He will be in Alberta for a few days starting February 26th. Then Saskatchewan and Manitoba. He is ready to meet with CAHPER groups which wish to use him.

* * *

Dr. Paul Hauch has been appointed chairman of a Medical Sports Advisory Committee of the Canadian Olympic Association.

* * *

In a recent issue listing Honour Award winners the names of J. G. Lang, J. H. Ross and Miss F. A. Somers were inadvertently omitted for the year 1950.

* * *

Charlie Barbour has submitted a copy of a most interesting report concerning "Full-time Professional staff needed to serve the Winnipeg Public Recreation Programme for the next ten years". This study was conducted by a special committee established on the Winnipeg Board of Parks and Recreation.

SUBSTANTIAL INCREASE IN OUR MEMBERSHIP

Membership in our Association is rapidly increasing. The Western areas have been on a very aggressive membership campaign this fall which has produced good results.

Branches, which bring together people in a small area, are being formed in Ontario. This kind of branch permits these people to meet frequently and to undertake projects and studies.

The student membership has increased markedly as Directors have urged students to have a part in the affairs of the Association.

We now number a thousand members. Some 250 are student members. There are about 25 life members and 90 subscription memberships. Each month the National office notifies those whose membership has expired. At present writing, January 1st 1960, there are 200 members who have not renewed their membership. This covers Sept., Oct., Nov., Dec.

Please look at the address on your Journal envelope. Near your name and address the name of the month is printed. That is the month you should renew your membership. Help the Association by keeping track of only one membership—your own.

BOOK REVIEWS

By C. R. B.

"The Duke of Edinburgh's Award"
Leaders' Handbook 1958.

Leadership training, preparation for going on challenging expeditions and emergency service to one's fellows are parts of this learning and activity programme under the distinguished patronage of Prince Philip.

Boys 14-19 years of age are challenged by the programme to use their leisure time to good advantage for self-improvement. Fitness generally will be increased for those taking part.

Targets are established for three levels of achievement. Boys 14 years and over attempt the First series. Second and Third series are for those boys older than 14 years who have satisfied the requirements for the First series.

Each series is made up of four sections each of which must be undertaken and the set standards attained to merit the award.

The four sections of each Series are:

A. Rescue and Public Service Training.
B. The Expedition.
C. Pursuits.
D. Fitness.

Canada could well use this plan and the help assistance and leadership of those who train themselves under the scheme. Perhaps this could be called "Duke of Edinburgh Award, Canada", sponsored by CAHPER.

"THE FIVE-YEAR PROGRAMME IN SCHOOL HEALTH"

Report No. 7. The National Committee for School Health Research
206 Huron Street,
Toronto, Ontario.

Over ten years ago this Committee initiated the first of a series of studies of health conditions of elementary and secondary schools in Canada.

1945-46 Report No. 1. "A Health Survey of Canadian Schools"
Report No. 2. "Mental Health in the Schools"
1946-47 Reports Nos. 3&4 "Absenteeism in Canadian Schools"
Report No. 5. "An Aid to Better School Housekeeping"
Report No. 6. "Health Instruction in Teacher Training Institutions".
1947-48 Report No. 7. "The Effect of a School Meal Program on Pupil Absence"
1947 "The Effects in a Community of a Course in Constructive Medicine"

This pamphlet summarizes the findings of these studies briefly. For those who wish to review any one of them carefully they may be obtained at the National Committee office in Toronto.

Perhaps it is time to repeat them to determine what effects if any the findings have had. Certainly our present teachers in training would benefit from at least a reading of them.

"Canadian Research Digest"
Published by the
Canadian Education Association
206 Huron St.,
Toronto, Ontario.
Subscription rate $3.00 per year.

For Canadians this Digest is a fine addition to our periodicals. The first two issues of Volume One summarize much research covering the subjects of reading and arithmetic. Included are digests of such topics as Theory of Administration, School District Reorganization, Promotions and Education:

"Organization and Structure:

"A. It has long been felt that administrators, teachers, supervisors and school boards would make better decisions and introduce more effective practices if they had available to them knowledge of the findings of educational research in a form which is quickly scanned and evaluated in the light of their own, local situation. The problem of the practitioner is to keep pace with the continually advancing field of educational research. To utilize the findings he must know where they are and what they are. Lacking knowledge of what educational research has discovered and time to search, educational practitioners do not have the benefits of research. Consequently, many excellent studies have little effect on everyday practice.

(Continued on page 40)

"B. The publication of this digest of educational research will, it is hoped, assist in bridging the gap between findings and their application in practice. Our aim is to provide the educational practitioner with facts gleaned from research which he can use in attacking the problems confronting him, give him new insights into possible solutions, and stimulate him to go beyond existing findings to discover additional facts for himself. From the vast material reported by research, an attempt will be made to select those items which promise to be of immediate help and assistance. At the same time, through the publication of abstracts, summaries and bibliographies, information will be made available on studies of interest which are now under way in many countries, including Canada. It was with this as one of the major purposes that the Research Department was established by the Canadian Education Association."

You will want to receive this quarterly regularly if you are interested in education generally and/or if you have anything to do with research.

* Quoted from Volume 1, No. 1 pp. 4,5.

"Anatomy for Students and Teachers of Physical Education"

By J. W. Perrott, University of Sydney. Published by Edward Arnold Ltd., London, England. 1959. PP 260. $5.00. Available through the Macmillan Company of Canada Ltd., 70 Bond Street, Toronto, Ontario.

When a lecturer in anatomy takes the trouble to write a text especially for the use of physical education teachers and students we should give such a text a thorough reading. This text "Anatomy" merits your attention if you are involved in movement education.

Physical educators should understand the structure of the tissues and the systems if they are to direct others to use their bodies in work and play. You may not always agree with Prof. Perrott. You will need to be well-grounded in facts to argue with him.

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